NORMAL FIRE REHABILITATION PLAN SUPPLEMENT
FINDING OF NO SIGNIFICANT IMPACT
AND
DECISION RECORD
BAILEY FIRE (X-297)
BLM/EK/PL2001/063

Finding of No Significant Impact:

Based on the analysis of potential environmental impacts contained in Normal Fire Rehabilitation Plan Supplement Environmental Assessment BLM/EK/PL2001/063, I have determined that the proposed action will not have significant impacts on the human environment and that an Environmental Impact Statement is not required.

Decision:

It is my decision to implement the Normal Fire Rehabilitation Plan (NFRP) Supplement as described in the Environmental Assessment for the Bailey Fire BLM/PL2001/063. Over 432 acres of public rangeland managed by the Bureau of Land Management Elko Field Office and 769 private acres were burned during this fire. Approximately 216 acres of the 432 acres of burned public land will be rehabilitated by aerial seeding and 150 acres will be drill seeded with multiple species seed mixtures. Approximately 2.8 miles of dozer line will be rehabilitated. Approximately 2.7 miles of new permanent fence will be constructed to facilitate grazing closures. The approximately 150 acres proposed for drill seeding, 5.5 miles of dozer and fence lines will be inventoried for cultural resources. Monitoring of the burn for infestation of noxious weeds will be conducted. Post-fire grazing management, including the period of time needed for closure, will be determined based on monitoring and achievement of site specific resource objectives.

Rationale:

Implementation of the proposed action described in the NFRP Supplement EA for the Bailey Fire will protect soils in the burned area, including preventing potential loss of soil due to wind and water erosion; will reduce potential invasion and establishment of noxious weeds and cheatgrass; will provide quality forage for livestock and wildlife; and will facilitate meeting established standards and guidelines for livestock grazing.

The Elko Resource Management Plan is silent for the proposed action. The proposed action is consistent with the objectives of the RMP and is consistent with federal, state, and local laws,

regulations, and plans to the maximum extent possible

Monitoring:

Post-treatment monitoring studies will be conducted to evaluate the effectiveness of the proposed treatments and to determine the time frame for reopening lands for grazing.

_____ _____

Helen Hankins
Elko Field Office

Date

NORMAL FIRE REHABILITATION PLAN SUPPLEMENT
ENVIRONMENTAL ASSESSMENT
BAILEY FIRE (X-297)
BLM/EK/PL-2001/063

Introduction:

This Supplement Environmental Assessment (EA) tiers to the Elko Field Office FY 2000 Normal Fire Rehabilitation Plan Environmental Assessment (NRFPEA) BLM/EK/PL2000/037. The Proposed Action includes NFRPEA Treatment # 1 (Grazing closure), 2 (Planting of multiple species seed mixtures), 5 (Dozer line rehabilitation), 8 (Invasive, nonnative weed species control), and 10 (Cultural resource site stabilization and protection). The format of this Supplement EA follows the outline in the Emergency Fire Rehabilitation Handbook, BLM Manual Handbook H-1742-1 dated 7/27/99 and is consistent with the draft Interagency Burned Area Emergency Stabilization and Rehabilitation Handbook, Version 1.0, dated 6/14/01.

List of Preparers:

Rusty Stovall	GIS Specialist
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Tom Warren	Emergency Fire Rehabilitation Coordinator
Ken Wilkinson	Wildlife Biologist
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Project Area Description:

A. Fire Description:

The fire was started by a lightning strike and was reported on August 12, 2001 and was controlled on August 13, 2001. It burned over 432 acres of public land and 769 acres of private land. Two grazing allotments were affected, the Indian Springs and Pine Mountain Allotments. The fire impacted less than 3 % of either Allotments. No structures were burned in the Bailey Fire.

B. Vegetation and Soil Description:

The burned area ranges in elevation from 5,200 ft to 6000 ft. The vegetation was comprised primarily of Wyoming big sagebrush and rubber rabbitbrush with an understory of Sandberg's bluegrass and cheatgrass.

Soils that occur on alluvial fans and upland terraces on 4 to 30% slopes occupy approximately 65% of the burned area.. They developed from mixed rock and loess with a volcanic ash component. Soils on slopes less than 15 percent are generally deep and have fine sandy loam textures. The soils on slopes greater than 15 percent are shallow over tuff, and also have fine sandy loam textures. Runoff is medium and the water erosion hazard is slight on the less sloping areas and high on the steep slopes. Wind erosion hazard is moderate to high.

Soils that occur on the high alluvial terraces comprise approximately 20 percent of the burned area. They developed in mixed alluvium with some loess that is high in volcanic ash or in alluvium from tuff. These soils are moderately deep and occur on 2 to 15 percent slopes. Surface texture is gravelly loam and the subsoil is clay. An indurated silica cemented hardpan occurs at a depth of approximately 25 inches. These soils have slow to moderately slow permeability and medium runoff. The wind and water erosion hazards are moderate when the soils are disturbed.

Soils along and paralleling Trout Creek are deep and medium textured, commonly containing gravel and cobble. They also developed in loess with a high volcanic ash content. These soils have moderately slow to moderately rapid permeability and runoff is slow. The water erosion hazard is slight, however, Trout Creek's streambanks are actively eroding. The wind erosion hazard is slight to moderate when the soils are disturbed. Grazing should be avoided until the vegetation is fully reestablished to prevent excessive erosion. These soils represent approximately 15% of the burned area.

The proposed seeding and livestock closure on public land should prevent excessive accelerated erosion from occurring, unless a large precipitation event occurs before the vegetation becomes reestablished.

Proposed Project Treatments:

A. Revegetation**:**

1. Wildlife aerial seeding

Approximately 216 acres (every other swath) within 432 acres would be seeded with Basin big sagebrush and western yarrow. The area to be seeded would provide forage and cover for wildlife within the burn area. If possible, seed would be broadcast on snow to aid in germination and reduce seed consumption by rodents and birds.

2. Rangeland drill seeding:

Approximately 150 acres would be drill seeded with a mixture of Nordan and Intermediate crested wheatgrass. The purpose of the seeding would be to reduce the spread of cheatgrass and noxious weeds in the burn area. In addition, the establishment of perennial grasses would help stabilize an area that has experienced 2 fires in the past 3 years.

3. Monitoring to detect noxious weed invasion of burned areas:

If noxious weed infestations are detected after fire rehabilitation efforts, appropriate Integrated Pest Management (IPM) control measures would be implemented to control the invasion. In particular, any disturbed dozer lines and adjacent areas would be targeted for this noxious weed monitoring and subsequent treatment if weeds are detected.

B. Structures:

1. Fencing:

Approximately 2.8 miles of new fence would be constructed to allow closure of seeded areas to grazing for a period to be determined by post-rehabilitation monitoring. These fences are needed to protect the proposed seeding treatments and to allow for vegetation to become reestablished. The fences will be evaluated in the next two years to determine if they would be needed for long term management of the allotments or if they should be removed following the closure period.

C. Erosion Control Treatments:

1. Dozer line rehabilitation:

Approximately 2.8 miles of dozer lines would be rehabilitated by pushing back berms, regrading disturbed areas, and drill or aerial seeded with Nordan and Intermediate crested wheatgrass to reduce erosion and encourage revegetation.

D. Site Preparation: None

E Other:

1. Cultural resource inventories:

Cultural resource inventories would be conducted along the approximately 2.8 miles of dozer lines, 3.8 miles of fence lines, and 150 acres proposed for drill seeding. These inventories would identify any cultural resources that might need to be protected during rehabilitation treatments.

Consideration of Critical Elements and Resources:

The following critical elements of the human environment are not present or are not affected by

the proposed action or alternative:

ACECs
Environmental Justice
Farmlands, prime or unique
Wastes, hazardous/solid
Wetlands/Riparian Zones
Wild and Scenic Rivers
Wilderness

Critical elements and resources brought forward for analysis:

A. Air Quality:

The burned area would be susceptible to wind erosion until revegetation occurs. Wind erosion can increase Particulate Matter #10 (PM#10) emissions causing exceedence of PM #10 air quality standards which can negatively affect human health. In addition, airborne dust can cause visibility and safety problems on roads in the area. The proposed vegetation and erosion control treatments would encourage regrowth of vegetation, thus reducing future potential air quality impacts.

B. Cultural Resources:

The Bailey Fire occurred within an area known to archaeologists as the Central Great Basin which has been inhabited by humans for approximately 12,000 years.

Archaeological sites and cultural properties in this area must be afforded protection whenever possible. Section 106 of the Natural Historic Preservation Act mandates that the federal government would account for cultural resources in its projects and undertakings, including fire rehabilitation efforts. Ground disturbing activities such as drill seeding, dozer line rehabilitation, and fence construction could damage cultural sites. Therefore, areas designated for mechanized seeding and other ground disturbance would be inventoried for cultural resources before the disturbance occurs in accordance with the State Protocol Agreement Between BLM, Nevada and the Nevada State Office of Historic Preservation (SHPO). At a minimum, to reduce potential impacts to cultural resources, activities that involve mechanized surface disturbance of less than 10 cm depth would generally have transect spacing of 100 meters. More intense inventory will be used for highly sensitive areas. If surface disturbance is greater than 10 cm, then 30 meter transect intervals would be used.

All cultural resources discovered or relocated will be plotted on maps and at a minimum would be recorded on the Nevada IMACS short form. Resources except those previously determined not eligible, by BLM and SHPO, or that have been fully mitigated, would be flagged for avoidance and avoided during rehabilitation activities. Flagging would be placed to minimize

the potential for looting and vandalism and removed as soon as possible.

C. Native American Religious Concerns:

By law, policy and executive order, BLM is required to undertake a good-faith consultation process with regional Native American tribal and band governments prior to projects that might affect Native American sacred areas, Traditional Cultural Properties or other traditional values. Native Americans would be consulted as appropriate prior to any ground disturbing activities or herbicide treatments. If the BLM obtains information identifying Traditional Cultural Properties or other areas having traditional or religious significance, then the BLM would insure that reasonable measures are taken to avoid impacts to these areas of concern to Native Americans.

D. Threatened, Endangered, Candidate, or Sensitive Species:

The area provides habitat for golden eagles, burrowing owls, Swainson's hawks and ferruginous hawks, which are State of Nevada Listed Species. The area also provides summer/brood-rearing habitat for sage grouse, a BLM Sensitive Species. Nevada BLM policy is to provide State of Nevada Listed and BLM Sensitive Species with the same level of protection as is provided for candidate species to prevent further listings as threatened or endangered. The proposed action would not likely affect any other BLM Special Status Species of plants or animals.

Although the suspected causes of sage grouse decline are numerous, loss of habitat, including loss by fire, ranks at the top of the list. Rehabilitation of sage grouse habitat, and the prevention of invasion by fire prone annual weeds such as cheatgrass, is a wildlife priority of both BLM and the Nevada Division of Wildlife. The proposed seeding treatment is designed to help restore sagebrush habitat and/or reduce the impacts from the invasion or re-invasion of fire prone annual weeds. The artificial seeding of basin big sagebrush and later successful establishment of this species from this effort would ensure that this species is on site as a future seed source, and cover and forage, in the event that natural recovery is slow (See Migratory Bird Section below). Sage grouse would be able to more fully utilize the burn area with big sagebrush cover. Otherwise, many areas on the burn would likely be avoided until a semblance of shrubs naturally reestablish.

E. Migratory Birds

The proposed rehabilitation actions are located in a sagebrush habitat type. The Nevada Partners in Flight Bird Conservation Plan identifies the following bird species associated with this physiographic region: sage grouse (obligate), black rosy finch, ferruginous hawk, gray flycatcher, loggerhead shrike,
vesper sparrow, prairie falcon, sage sparrow, sage thrasher, Swainson's hawk, burrowing owl, calliope hummingbird, Brewer's sparrow, Western meadowlark, black-throated sparrow, lark sparrow, green-tailed towhee, Brewer's blackbird, horned lark, and lark sparrow.

The greatest threat to these sagebrush-dependant migratory bird species is type conversion of

sagebrush communities. Maintaining complete, diverse sagebrush communities is integral to conservation efforts for these species. Low elevation sagebrush sites, such as the project area, are vulnerable to conversion to cheatgrass types following wildfire. The proposed action to reseed with aggressive perennial grasses to prevent cheatgrass from dominating the site, coupled with secondary efforts to re-establish sagebrush on the stabilized site (as necessary) should provide beneficial impacts to these species and is consistent with the conservation measures listed in Section 3(e) of the President's Migratory Bird Executive Order.

F. Visual Resources:

The proposed project treatment area is within Visual Resource Management Class III and the objective of this class is to partially retain the existing character of the landscape. The level of change to the characteristic landscape should be moderate.

Within Class III VRM areas, management activities may attract attention but should not dominate the view of the casual observer. Changes should repeat the basic elements found in the predominant natural features of the characteristic landscape. Both the fire itself and fire suppression activities such as creation of dozer lines have resulted in visual impacts to the area. Revegetation efforts are designed to blend into the background without attracting undue attention and aid in restoring the area to a more characteristic landscape. Seeding the burned areas and dozer lines would serve to reduce the visual impacts in the area.

G. Wildlife:

Wildlife was adversely impacted by the Bailey Fire primarily through temporary loss of habitat through removal of vegetation by the fire. The majority of the area was previously burned as part of the 1999 Sadler Fire Complex. The proposed rehabilitation wildlife seeding will benefit wildlife by ensuring that a shrub component remains in the burned area to provide forage and cover for wildlife. The area provides yearlong mule deer range. Overall, there are approximately 100 bird species, 70 mammal species and several reptile and amphibian species that can be found in sagebrush habitats on the allotment. The area provides habitat for many of these species.

H. Grazing:

The proposed closures to grazing within the burned area would protect seeding efforts and aid in natural revegetation of burned public rangeland, while reducing the potential for future noxious weed and cheatgrass infestations. Grazing closures will also improve future forage conditions for both livestock and wildlife. However, grazing closure and relocation of livestock will have some short term adverse impacts on ranchers in the area who normally use the allotment for grazing. The actual AUM losses suffered by ranchers have not been determined at this point. Through field inventories and monitoring, GIS analyses, and consultation, cooperation, and coordination with individual permittees, specific rest periods and other grazing management options would be identified to reduce impacts to ranchers where possible.

I. Water Quality, surface/ground:

Trout Creek is a perennial stream that flows along the northern boundary of the burn. It typically flows about 1 cfs, more during spring runoff and less during late summer. It is tributary to Pine Creek, which drains directly into the Humboldt River. The Humboldt River between Palisade and Battle Mountain, is on the EPA 303(d) list of impaired waters for violations of total phosphorus, turbidity, and iron. The 1998 NDEP Nevada Water Quality Assessment 305(b) report states that total phosphates, turbidity, and suspended solids standards were consistently not attained. The report noted that agricultural and rangeland nonpoint sources are adding large sediment and nutrient loads to the waters of the State.

The same section of Trout Creek burned in 1999 as part of the Sadler Fire. The creek was in nonfunctional condition prior to the fire. Since that time, the stream has been closed to grazing and the riparian condition has improved to functional at risk, upward trend. The Bailey Fire burned up to and across Trout Creek in places, but due to the improved riparian condition from two years of grazing rest, there was a vegetative strip along the creek that did not burn.

BLM has a water quality monitoring site in the SW sec.26, T.30 N., R.52 E. Data has been collected during spring, summer, and fall each year since May 1998. Water quality parameters that exceed the Humboldt River standards at Battle Mountain include total phosphorus, turbidity, total suspended solids, and fecal coliform. Although there is limited data, there was a noticeable improvement in water quality following the grazing closure from the Sadler Fire. The proposed grazing closure would be a benefit to water quality. This would allow the seedlings to become well established and provide a good buffer strip around the creek to capture sediment and reduce peak flows.

J. Invasive, Nonnative Species:

Fire suppression efforts, including dozer line construction and use of engines and other mechanized vehicles, may have introduced noxious weed species seeds into the burned area. In order to reduce the potential impacts of an invasion of noxious weeds, monitoring should be conducted after rehabilitation treatments are completed. If noxious weeds are discovered to have invaded the burn area, further herbicide treatments would need to be implemented to reduce the spread of the noxious weeds. The proposed noxious weed monitoring and treatments would help to prevent or reduce noxious weed invasions of the Bailey burn area.

K. Floodplains:

There is an 800 foot wide floodplain along Trout Creek that is mapped immediately west of the burn in Eureka County. The corresponding Elko County floodplain map is not printed, but it can be inferred that there would be a floodplain along Trout Creek in Elko County also. Due to the small size of the fire and the moderate intensity, there should not be any significant impact to

floodplains. Some increased runoff into Trout Creek can be expected as well as some accelerated erosion. The stream was not in proper functioning condition before the fire and already was lacking the woody species and root binding vegetation to withstand large flood events.

L. Cumulative Impacts:

Cumulative impacts for proposed Emergency Stabilization and Rehabilitation treatments are discussed in the programmatic Elko Field Office FY 2000 Normal Fire Rehabilitation Plan Environmental Assessment (NFRPEA) BLM/EK/PL2000/037, which is available for review at the BLM Elko Field Office.

Project Cost Summary: (the cost summary information can be found in the Burned Area Emergency Stabilization and Rehabilitation (BAER) Plan and Accomplishment Report for the August 2001 Fire Complex.)

Project Maps: (project maps can be found in the Burned Area Emergency Stabilization and Rehabilitation (BAER) Plan and Accomplishment Report for the August 2001 Fire Complex.)

Cost/Risk Assessment: (the cost/risk assessment can be found in the Burned Area Emergency Stabilization and Rehabilitation (BAER) Plan and Accomplishment Report for the August 2001 Fire Complex.)

Native/Nonnative Worksheet: (the native/nonnative worksheet can be found in the Burned Area Emergency Stabilization and Rehabilitation (BAER) Plan and Accomplishment Report for the August 2001 Fire Complex.)